UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

28289

7500

02/03/2009

THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219

EXAMINER

AVILA, STEPHEN P

ART UNIT PAPER NUMBER

3617 DATE MAILED: 02/03/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,703	06/20/2006	Woo-Chul Jung	1455-061783	3491

TITLE OF INVENTION: APPARATUS AND METHODS FOR TREATING BALLAST WATER BY USING ELECTROLYSIS OF NATURAL

SEAWATER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/04/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS; This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				e: A certificate of	mailin	g can only be used fo	r domestic mailings of the	
			Fee(pape have	s) Transmittal. Thers. Each additional its own certificate	is certil I papei e of ma	cate cannot be used f r, such as an assignme iling or transmission.	or any other accompanying nt or formal drawing, must	
28289	7590 02/03	/2009				e of Mailing or Trans		
THE WEBB L 700 KOPPERS 1 436 SEVENTH		I her State addr trans	reby certify that the	is Fee(s) Transmittal is being	g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.		
PITTSBURGH,	PA 15219						(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	RNEY DOCKET NO.	CONFIRMATION NO.	
10/583,703	06/20/2006	•	Woo-Chul Jung			1455-061783	3491	
TITLE OF INVENTIC SEAWATER	N: APPARATUS ANI	METHODS FOR TR	EATING BALLAST WA	ATER BY USING	G ELE	ECTROLYSIS OF N.	ATURAL	
SLIWITER								
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	05/04/2009	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	1				
	ГЕРНЕМ Р	3617	114-125000					
1. Change of correspond			2. For printing on the p	atent front page, li	st			
CFR 1.363).	ondence address (or Cha	nge of Correspondence	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,					
Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.			(2) the name of a single firm (having as a member a 2					
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON T	ГНЕ PATENT (print or typ	oe)				
PLEASE NOTE: Un recordation as set fort	less an assignee is ident h in 37 CFR 3.11. Comp	ified below, no assignee pletion of this form is NO	data will appear on the pa T a substitute for filing an	atent. If an assign	ee is id	dentified below, the de	ocument has been filed for	
(A) NAME OF ASSI	•		(B) RESIDENCE: (CITY	ě .	COUNT	CRY)		
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent): \Box	Individual 🗖 Co	orporat	ion or other private gro	oup entity 🔲 Government	
4a. The following fee(s)	are submitted:	41	o. Payment of Fee(s): (Plea	se first reapply a	ıv prev	viously paid issue fee	shown above)	
☐ Issue Fee			A check is enclosed.					
☐ Publication Fee (No small entity discount permitted)☐ Advance Order - # of Copies			Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
			overpayment, to Depo	sit Account Numb	er	enclose a	n extra copy of this form).	
5. Change in Entity Sta	tus (from status indicated as SMALL ENTITY statu		☐ b. Applicant is no long	var claiming SMA	I EN	FITV status See 37 C	EP 1 27(a)(2)	
NOTE: The Issue Fee an	d Publication Fee (if req	uired) will not be accepted	d from anyone other than t				ne assignee or other party in	
interest as shown by the	records of the United Sta	tes Patent and Trademark	Office.					
Authorized Signature				Date				
Typed or printed name				Registration N	lo			
This collection of inform	nation is required by 37 C	FR 1.311. The information	on is required to obtain or r	etain a benefit by t	he pub	lic which is to file (and	by the USPTO to process)	
submitting the complete this form and/or suggest	d application form to the ions for reducing this but	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th ONOT SEND FEES OR (1.14. This collection is est depending upon the indive Chief Information Office	idual case. Any co r, U.S. Patent and	mmen Trader	ts on the amount of timers of the same of	ng gathering, preparing, and me you require to complete artment of Commerce. P.O.	

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/583,703	06/20/2006	Woo-Chul Jung	1455-061783	3491	
28289	590 02/03/2009		EXAMINER		
THE WEBB LA	W FIRM, P.C.	AVILA, STEPHEN P			
700 KOPPERS B		ART UNIT	PAPER NUMBER		
436 SEVENTH AVENUE PITTSBURGH, PA 15219			3617 DATE MAILED: 02/03/2009		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 129 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 129 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/583,703	JUNG ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Stephen Avila	3617	
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	ppears on the cover sheet was IS (OR REMAINS) CLOSED 15) or other appropriate comma RIGHTS. This application is 113 and MPEP 1308.	rith the correspondence address- in this application. If not included nunication will be mailed in due cou	rse. THIS
1. This communication is responsive to the amendment of	<u>1/14/.09</u> .		
2. \boxtimes The allowed claim(s) is/are <u>1-7,9-17 and 19-21</u> .			
3. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the: 1. Certified copies of the priority documents hat 2. Certified copies of the priority documents hat 3. Copies of the certified copies of the priority of International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATINOTED BLOW. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be substituted by the Notice of Draftsperior (a) including changes required by the Notice of Draftsperior (b) including changes required by the attached Examined Paper No./Mail Date Identifying indicia such as the application number (see 37 CFF each sheet. Replacement sheet(s) should be labeled as such in the priority documents had not be required by the labeled as such in the priority documents had not be such as the application number (see 37 CFF each sheet. Replacement sheet(s) should be labeled as such in the priority documents had not be reported by the labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be labeled as such in the priority documents had not be priority documents had not be priority	ave been received. ave been received in Applicated documents have been received. E" of this communication to find the submitted. Note the attached Expires reason(s) why the oath const be submitted. erson's Patent Drawing Review. er's Amendment / Comment of the submitted of the submitted.	ion No ed in this national stage application e a reply complying with the require (AMINER'S AMENDMENT or NOTI or declaration is deficient. ew (PTO-948) attached or in the Office action of the drawings in the front (not the back	ements
DEPOSIT OF and/or INFORMATION about the department attached Examiner's comment regarding REQUIREMEN	posit of BIOLOGICAL MAT	TERIAL must be submitted. Note	the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material /Stephen Avila/	6. ☐ Interview 5 Paper No 7. ☐ Examiner'	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowar	nce
Primary Examiner, Art Unit 3617			
,			